

**Notice of Allowability**

Application No.

10/092,603

Examiner

Khanh Dang

Applicant(s)

DAS SHARMA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☒ The drawings filed on 08 March 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_

*Khanh Dang*

Khanh Dang  
Primary Examiner

### **REASONS FOR ALLOWANCE**

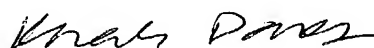
The following is an examiner's statement of reasons for allowance:

The prior art does not disclose or suggest a virtual input/output (I/O) interconnect mechanism having a plurality of I/O devices and a plurality of processing units, the mechanism comprising: a reroute module identification block that receives the destination address from a range register decoder, the reroute module identification block, comprising: an original module identification that provides an address of one or more original modules in the computer system, and a remapped module identification that provides logical destination module identifications of substitute modules in the computer system, wherein a substitute module replaces functions of an original module in the computer system (claim 1); a method for rerouting a transaction along a virtual path from an original module to a substitute module comprising: storing a remapped module identification that identifies the substitute module as a substitute for the original module when the original module is failed; receiving a transaction for the failed original module, the transaction including an address of the failed original module; extracting the address; decoding the address to provide an identification of the failed original module for receipt of the transaction; comparing the identification of the failed original module to the remapped module identification; and rerouting the transaction to the substitute module based on the remapped module identification (claim 13); a method for creating a virtual hardware path in a computer system, comprising: storing an identification of the failed module and an identification of the substitute module, wherein the failed module identification is related to the substitute module identification; programming the

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substitute module to receive transactions addressed to the failed module (claim 21); an apparatus that creates a virtual hardware path in a computer system, comprising: a reroute module identification block, comprising: an original module identification section, and a substitute module identification section, wherein an identification for a failed original module is entered into a space in the original module identification section and an identification for a substitute module is entered in to a space, corresponding to the space in the original module identification section, in the substitute module section; and programming adapted to the substitute module, wherein the substitute module is reprogrammed to claim transactions addressed to the failed original module and to copying a state of the failed original module to the substitute module (claim 23); and a method for replacing failed components, comprising: determining if a substitute component is available; suspending activities to the failed component if there is a substitute component found, copying a state of the failed component to the substitute component, deconfiguring the failed component, updating reroute module identification to remap the failed component to the substitute component, updating configuration registers of the substitute component, and resuming activities to the failed component (claim 24).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



Khanh Dang  
Primary Examiner